"assumed that there was a spiritual dimension to life and aimed at visualizing context beyond what the eye can see."

I've always loved the way spiritualism has been incorporated into af Klint's work. I know part of my thesis I'm developing will involve inherent truths of life that I feel are revealed through art and engineering, and that Klint's art is a fantastic example of that. There is also a very mechanical element to all of Klint's incredibly geometric work that I want to do more exploration on. I want to learn what tools and techniques she used in her work, and how they allowed her to create such intricate art. This is in part due to her being one of the oldest artists I've considered thus far. She was born in 1862, and I'm excited to look into what tools were at her disposal at that time, and how she used them.

Jones, Josh. "Discover Hilma Af Klint: Pioneering Mystical Painter and Perhaps the First Abstract Artist." Open Culture, Open Culture, LLC, 1 Aug. 2018,

www.openculture.com/2018/07/discover-hilma-af-klint-pioneering-mystical-painter-perhaps-firstabstract-artist.html.

his deliberately and delicately constructed pieces, made from copper wire, foil, ribbon, beads, magnets, and other found items, in combination with small rhythmic or concentrically patterned paintings, generated an electromagnetic energy that could alleviate pain and prevent—perhaps even cure—disease. Blagdon arranged his machines and paintings in a manner that was to aid in the conduction of electromagnetic pulses in a shed he built on his farm in Nebraska.

I saw this exhibit in person at the Kohlrr Arts foundation in Milwaukee Wisconsin, which is why I chose this article and accompanying artwork to explore in my project - having had the pleasure of experiencing and enjoying this art piece in person, as it is impossible to understand it's vastness and beauty without having been inside of it, I am excited to delve into Blagdon's work. Much like the Milford Graves exhibit, this piece pushed me to consider art and engineering through a more casual, yet ritualistic understanding. It is particularly inspiring when considering the form my cumulative art piece will take, as it completely erases any preconceived notions of what art is and how it should be created.

Yau, John. "The Wondrous Story of Emery Blagdon's Healing Machine." Hyperallergic, 23 Oct. 2015, <u>hyperallergic.com/74524/the-wondrous-story-of-emery-blagdons-healing-machine</u>.

I watched a documentary about Gregory Van Maanen at - you guessed it - the Kohler Foundation. I found him incredibly interesting because of the way his artistic practices were intrinsically intertwined with his life. His house was his art, and the way he lived his life was part of his art. It communicated the ways art can shape the way a person lives beyond just by creating. I believe this phenomenon exists in engineering as well. Throughout CTE, Mr. Kamal has taught us how to think like an engineer and how to use the principles of engineering to better our lives. This made me want to do more research on Maanen, and explore him for my capstone.

"Gregory Van Maanen » Kohler Foundation Inc." Kohler Foundation, www.kohlerfoundation.org/preservation/major-collections/gregory-van-maanen. Accessed 26 Jan. 2022.

This source is actually a virtually designed re-creation of an art exhibit I had the pleasure of seeing in-person in June while it was available. I found the show was an incredible example of what expressing thoughts and ideas through engineering can look like. While there are many components to the show, the one I found most interesting was essentially a sculpture garden that demonstrated and presented what Graves had found in his research of music, botany, anatomy, acupuncture, machinery, and other disciplines. I was most impressed by his work involving circuitry, lighting, and sensors that responded to the environment, with other mechanical fractures woven into the design of each sculpture. I found it to be the pinnacle of how art and engineering can be used in tandem to explore and explain the information most valuable to us.

Mohsen, Ali. "Milford Graves: A Mind-Body Deal - ICA Philadelphia." Institute of Contemporary Art - Philadelphia, PA, Institute of Contemporary Art, 15 June 2021, icaphila.org/exhibitions/milford-graves-a-mind-body-deal.

This essay is helpful to me in regards to considering how I would like to format my research. I want to explore many different aspects of the artists and their lives, work, beliefs, and processes. I believe the organization of this article could be a good guideline through which I could record my research. I want to explore many concepts as deeply as I would like, without it being too dense or unorganized.

I also just like the information on artist Kandinsky - I plan to talk about his work, and reading this essay gave me ideas on what to look into considering his art and career.

Admin, J. "Circles in a Circle by Wassily Kandinsky | Jotted Lines." Jotted Lines | A Collection Of Essays, Jotted Line, 19 Sept. 2020,

www.google.com/amp/s/jottedlines.com/circles-in-a-circle-by-wassily-kandinsky/amp.

This article is interesting because it explores the intersections of my topics through academic history. This more historical standpoint provides an interesting viewpoint to consider both subjects through. Most of the other specific people or events I'm researching have specific stories of a personal background in engineering or art, Thus, I am researching the specific way they shaped their lives around these topics. This however considers how artistic minds can push the boundaries of architecture. How understanding both the solid reality of engineering and the emotional impact of art can be incorporated to create better structures.

Nature Editorial, and Nicholas Fox Weber. "The Bauhaus at 100: Science by Design." Nature, Springer Nature Limited, 6 Aug. 2019,

www.nature.com/articles/d41586-019-02355-4?error=cookies\_not\_supported&code=bbd20b8f-7 6b3-4e93-886a-868b0136e717

Klimt's painting funnily enough contains a similar intricacy as af Klimt's work does. I've admired his use of color and geometry for a very long time. Along with this, I've seen his unfinished works at the Barnes, and been intrigued by his layering processes. This article is interesting because of the way it uses technology to enhance art. In this day and age of NFTs and AI art there's a lot of discussion on what is and isn't art, and how technology plays in making this distinction. I like how this technology is used to enhance the art of the creator in a unique and entirely new way. It shows one way technology can be used in accordance with art. Wallner, Emil. "The Klimt Color Enigma." Google Arts & Culture, artsandculture.google.com/story/the-klimt-color-enigma/SQWxuZfE5ki3mQ?hl=en Accessed 28 Jan. 2022.

This source will be a great addition to my project because I can use it to express what I love about unconventional art, and connect that to what I love about unconventional engineering- as well as how the two are similar in their creative ideals and processes. "Outsider art" is an interesting topic of conversation, both in what qualifies for that title, and why the title has been important for artists throughout history. This article will help me to explore my opinion concerning the labeling of "outsider art," and how I can connect that to the different labelings placed on engineering and engineers.

Indrisek, Scott. "Why 'Outsider Art' Is a Problematic but Helpful Label." Artsy, Artsy, 18 Oct. 2019,

www.google.com/amp/s/www.artsy.net/article/artsy-editorial-outsider-art-problematic-helpful-lab el/amp.

Alexander Calder is probably the first person who comes to my mind when I think of art and engineering. An engineer by trade, he branched into art and started by putting his mechanical engineering skills to use. His mobiles are impossible to create without an understanding of engineering and physics, and shows how those subjects can be very necessary to executing art.

I also enjoy his work and the ways you can practice engineering as he has. His creations show that engineering feats can be made for the sake of beauty, not just function. It creates an interesting middle ground between function and form that I would like to incorporate in both my art and engineering works.

THE EDITORS OF ARTNEWS. (2015, December 19). 'an engineer of beauty': Alexander Calder on his mobiles and the later stages of his career, in 1973. ARTnews. Retrieved March 18, 2022, from

https://www.google.com/amp/s/www.artnews.com/art-news/retrospective/retrospective-calder-19 73-5530/amp/

## 'Alexander Calder: Modern From the Start' Review: Artist, Engineer, Giant

I am excited to explore the art featured in this article in my project - I think it is a beautiful example of the intersection of art and engineering. Artist Rogan Brown displays extremely detailed visuals of microorganisms and cell structure, which, as the title suggests, are laser-cut as well as hand-cut - this is an example of how engineering not only informs but also enhances the world of art and the expression of artists. This piece will help me to explore the ways in which engineering can be seen visually through art. Engineering can and should be seen as a very artistic field, and this is a great example of that.

"Hand and Laser Cut Paper Microbes by Rogan Brown." Colossal, Colossal, 6 Sept. 2021, www.thisiscolossal.com/2015/11/new-hand-and-laser-cut-paper-microbes-by-rogan-brown.